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UTILIZATION AND MARKETING

MONTANA FOREST PRODUCTS BULLETIN

Department of State Lands, Division of Forestry
2705 Spurgin Road, Missoula, Montana 59801
Ph: (406) 542-4300

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GARY G. BROWN, State Forester

PAUL MOORE, Editor

VOL. 13, NO. 3

MAY/JUNE 1988

This bulletin is mailed primarily to individuals engaged in the Forest Products Industry in Montana. In addition, it is mailed to county agents, lumber brokers, wholesalers, dealers of sawmill and logging equipment, educators, and Montana Tree Farmers, as well as the Departments of Forestry in many states.

The purpose of this newsletter is to communicate information regarding the properties and uses of wood products, promote efficiency in the utilization of wood from the stump to the end product, and to serve as an information source for members of the forest products industry.

All persons receiving this newsletter are asked to examine their mailing address and advise this office of any corrections needed for proper mailing.

FOREST MANAGEMENT - WATERSHED EFFECTS

The 1987 Montana Legislature passed House Joint Resolution 49, which directs the Environmental Quality Council to conduct a study on the relationship between forest management and watershed effects. The report to the legislature is due this fall.

The Environmental Quality Council has established two committees to address the issues raised through the resolution. The Best Management Practices (BMP) Technical Committee is reviewing BMPs currently used in Montana, comparing them with those used in other states and producing a revised listing of recommended forest management practices to protect water quality.

The watershed effects working group is charged with identifying water quality impacts resulting from forestry activities and evaluating the application and effectiveness of BMPs. A questionnaire has been developed to identify the location, cause, and impacts of non-point source pollution resulting from forestry activities. On-site evaluation of 40 to 60 timber sales for water quality impacts will be conducted this summer.

Both committees have representation from the timber industry, government land management agencies, regulators, environmental groups, and the general public.

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For more information on this effort, contact Hugh Zackeim at the Environmental Quality Council in Helena, 444-3742.

MONTANA'S FIRE SEASON IS HERE

Montana's State fire season began May 1st. State Forester Gary Brown explained that the date was set by the Montana Legislature.

Brown cautioned that much of the State is drier than normal for this time of the year, and wildland firefighting agencies are reporting elevated fire danger ratings, especially in small fuels that dry quickly, such as twigs and grass. "People should be especially careful with campfires and other fires they set intentionally to eliminate dead grass, weeds and debris. Fire agencies are experiencing an unusually high number of person-caused fires," Brown said.

USDA Forest Service Northern Regional Forester, John Mumma said, "The start of the State fire season automatically brings a number of restrictions into effect. From May 1st until September 30th, those who build fires in other than an established campground must have a shovel and 1-gallon water container in their possession. This requirement applies to people traveling with pack animals, on motorcycles or trail bikes, and cars and pickup trucks. But the shovel and water container requirement does not apply to backpackers and hikers."

During the State fire season all internal combustion engines are required to have approved spark arrestors or suitable mufflers.

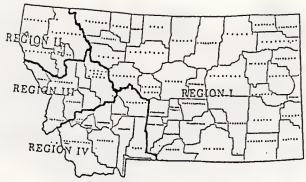
This includes chain saws, which need spark arrestors, and light vehicles such as cars and pickups that require baffle-type mufflers. Chain saw operators must have a shovel and fire extinguisher with them, in addition to having spark arrestors for their chain saws. All mobile or stationary power equipment used in commercial activity must be equipped with a 2-1/2-pound dry chemical fire extinguisher.

Brown and Mumma said they want people to enjoy Montana's outdoors this summer. "We just want recreationists, sportsmen and those working in the forests to be careful during the fire season. We hope that by making people aware of the fire season restrictions, unintentional violations can be avoided."

People who have questions about the Montana fire season restrictions should contact local Forest Service offices or offices of the Montana State Forester.

MONTANA LOG PRICE REPORT

The State-wide log price report on the following page catalogs recently delivered average log prices to sawmills by species using four geographical areas within Montana. Prices are provided by approximately 35 sawmills operating within the State. The report is compiled through the Extension Forester's Office, School of Forestry, University of Montana, Missoula, Montana 59812.



Office of Extension Forestry
Montana Extension Service
c/o School of Forestry
University of Montana
Missoula, MT 59812

MONTANA SAWLOG AND VENEER LOG PRICE REPORT

MAY-JUNE 1988

The following information is a summary breakdown of recent past average prices reportedly paid by primary wood processors for logs of the various species listed. These prices are not necessarily a reflection of current market prices. Fair market prices may vary a great deal based on log size, length, quality, contract size and terms, and a number of other factors. All information reported is recent average price per thousand board feet (MBF), Scribner Decimal rule, delivered to the mill site, unless otherwise noted.

Prices provided for this report by individual firms are treated as confidential disclosure of the firm's operations. Any requests for mill-specific data which have been provided for the log report will be denied.

SAWLOGS Scribner Dec C MBF	REGION I	*	REGION II	*	REGION III	*	REGION IV	*
	Avg. Low High		Avg. Low High		Avg. Low High		Avg. Low High	
Ponderosa pine	$120/$110/$130	G	$185/$150/$220	F			$145/$145/$145	G
(Yellow)	$140/$140/$140	G	$228/$185/$255	G	$233/$185/$270	G/F	$145/$145/$145	G
(Bull)	$110/$110/$110	G	$152/$135/$165	G/P	$132/$120/$150	G/P	$145/$145/$145	G
Lodgepole pine	$140/$140/$140	G	$150/$142/$155	G/F	$154/$140/$165	G/F	$170/$165/$185	G/F
Douglas-fir	$140/$140/$140	G	$151/$140/$160	G/F	$157/$150/$175	G/F	$169/$165/$185	G/F
Western larch			$151/$140/$160	G/P	$157/$150/$175	G/F		
Engelmann spruce			$154/$135/$170	G	$164/$155/$175	G/P	$171/$165/$185	G
Subalpine fir			$147/$140/$155	G/P	$148/$140/$165	G/P	$167/$165/$170	G
Grand fir			$143/$140/$155	G/P	$149/$140/$160	G/P		
Western red cedar			$188/$145/$250	G/F	$190/$190/$190	F		
Hemlock			$143/$140/$145	F/P	$140/$140/$140	P		
White pine			$238/$190/$300	G/F	$300/$300/$300	G		

VENEER LOGS Scribner Dec C MBF	STATEWIDE REPORT	
Species	Avg. Low High	Demand next 60 days*
Douglas-fir	$170/$170/$170	G
Ponderosa pine (bull)	$150/$150/$150	F/P
Western larch	$170/$170/$170	G
Engelmann spruce	$170/$170/$170	G

* Demand next 60 days

G = Good
F = Fair
P = Poor

COMPUTER PROGRAM CALCULATES LUMBER SHIPPING WEIGHTS

Lumber Weight and Volume Program: This simple to use Lotus 1-2-3 spreadsheet program using the MS-DOS operating system calculates weight, cubic volume, and scribner board foot scale of lumber. The program was designed to estimate lumber shipping weights, however, it can also calculate board feet lost due to improper lumber trimming. The data input necessary to run the program is: lumber size(s), moisture content(s), and specific gravities. a copy of the program can be obtained by sending a formatted diskette to the Montana Forest Products Bulletin Editor. MS-DOS and Lotus 1-2-3 are not included.

THE LUMBERMAN'S EXCHANGE

If you are involved in the Forest Products Industry from logging to sawmilling to furniture manufacturing, you need to be receiving "The Lumberman's Exchange!" We reach well over 37,000 locations in all fifty states and are truly one of a kind in the forest products industry.

Call Wade Nowlin toll free at 1-800-821-9199 for your free sample copy and you'll soon find out why we're the forest industries favorite publication.

GUIDE TO APA PUBLICATIONS OFFERED

The extensive library of publications available from the American Plywood Association (APA) is chronicled in a recently updated catalog.

The "American Plywood Association Publications Index" lists nearly 70 products guides, technical references, and training and merchandising aids currently offered by APA. The materials are divided into such diverse categories as products and grades, design and construction, industrial applications, source lists, training/merchandising aids, and product data and application reference binders. The index also contains prices and a convenient order form.

For a free single copy of "American Plywood Association Publications Index," write the American Plywood Association, P.O. Box 11700, Tacoma, Washington 98411 and request form B300Q.

Source FPL Vol. 38, No. 4.

DEPARTMENT OF STATE LANDS TIMBER SALES

WOLF-FISHER TIMBER SALE

The Wolf-Fisher Sale is located within Section 14, T29N-R27W, Section 24, T29N-R28W, Sections 6 and 16, T28N-R28W, and Sections 16 and 36, T28N-R29W, MPM on the State's Libby Unit. Approximately 9,739 MBF consisting primarily of ponderosa pine is offered for sale.

Sealed bids will be opened at the Department of State Lands, Forestry Division, 2705 Spurgin Road, Missoula, Montana on June 27, 1988 at 2:00 p.m. Bids may be hand delivered or mailed and will be accepted any time prior to the bid opening. Bids must be accompanied by a deposit of $49,018.00, representing 5% of the appraised value of the sale in cashier's check, certified check, bank money order or bank draft to be applied to the stumpage for the successful bidder. Bid bonds will be accepted and, for the successful bidder, will be closed upon execution of the Timber Sale Agreement and Timber Sale Bond.

Prospective bidders can obtain the sale prospectus, sample agreement and bid forms from the Department of State Lands, Forestry Division, in Missoula, the Northwestern Land Office, Kalispell, or the Libby Unit Office, Libby.

SPRING HILL TIMBER SALE

Sealed bids will be received by the Administrator, Forestry Division, Department of State Lands, 2705 Spurgin Road, Missoula, Montana up to 2:00 p.m., June 22, 1988 for the merchantable timber designated for cutting in Section 36, T4N-R20W estimated to contain 1,691 MBF Douglas-fir, 732 MBF alpine fir, 372 MBF lodgepole pine, 340 MBF Englemann spruce, 1 MBF ponderosa pine, and 1 MBF dry sawlogs and other, more or less, for a total estimated volume of 3,137 MBF.

Bids will be accompanied by a deposit of $4,520.00, representing 5% of the appraised value of the sale in cashier's check, certified check, bank money order or bank draft to be applied to the stumpage for the successful bidder. Bid bonds will be accepted and, for the successful bidder, will be closed upon execution of the Timber Sale Agreement and Timber Sale Bond. Should the successful bidder be unable to execute the Timber Sale Agreement or obtain sufficient bond within the require time, the bid deposit will be retained by the Department as liquidated damages.

Full particulars regarding the terms of the contract regulations governing the sale and bid forms may be obtained from the Department of State Lands, Forestry Division, or the Southwestern Land Office, 1401 27th Avenue, Missoula, Montana, or the Hamilton Unit Office, Box 713, Hamilton, Montana 59840.

HUMBUG CREEK TIMBER SALE

Sealed bids will be received by the Administrator, Forestry Division, Department of State Lands, 2705 Spurgin Road, Missoula, Montana up to 3:00 p.m., June 22, 1988 for the merchantable timber designated for cutting in Section 34, T14N-R8W estimated to contain 51 MBF ponderosa pine, 1,487 MBF Douglas-fir, 22 MBF spruce, 809 MBF lodgepole pine, 1 MBF white fir, and 1 MBF dry sawlogs, for a total estimated volume of 2,371 MBF.

Bids will be accompanied by a deposit of $2,674.00, representing 5% of the appraised value of the sale in cashier's check, certified check, bank money order or bank draft to be applied to the stumpage for the successful bidder. Bid bonds will be accepted and, for the successful bidder, will be closed upon execution of the Timber Sale Agreement and Timber Sale Bond. Should the successful bidder be unable to execute the Timber Sale Agreement or obtain sufficient bond within the require time, the bid deposit will be retained by the Department as liquidated damages.

Full particulars regarding the terms of the contract regulations governing the sale and bid forms may be obtained from the Department of State Lands, Forestry Division, or the Southwestern Land Office, 1401 27th Avenue, Missoula, Montana, or the Clearwater Unit Field Office, Box 388, Greenough, Montana.

MONTANA SOFTWOOD SAWMILL IMPROVEMENT PROGRAM
SELECTED STUDY RESULTS

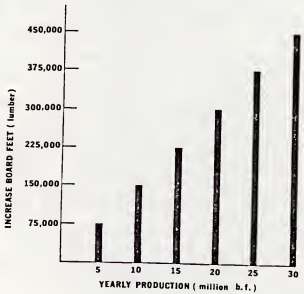
In 1973 the Sawmill Improvement Program was developed by the U.S. Forest Service, Forest Products Laboratory in Madison, Wisconsin. "The idea to increase productivity by improving efficiency was born due to concern over a projected lumber shortage. The Forest Service was pressured to get more timber on the market and to help stretch the nations softwood timber supply". Since the inception of the program hundreds of sawmill improvement studies (SIP) have been conducted nationally. These studies identified improvements that could be made in the milling process to increase lumber recovery and value.

Evidence from SIP studies indicates, on the average, lumber recovery is increasing, despite the fact that more mills today are sawing smaller and more defective logs. Today's successful sawmills understand the effect that sawing variation, planing allowance, product target size and kerf play on lumber recovery.

Because SIP studies are designed to analyze the efficiency of the processing equipment, only straight sound logs are used to determine actual LRF. After sawing, the boards are measured for length, width and thickness and a piece count is made by length and dimension.

Within board variation in thickness or width is an indicator of the performance of the saws. Between board variation is an indicator of the performance of the setworks, or the log transport mechanism.

What effect does increasing LRF have on annual production in a mill? Assume a mill produces 20 million b.f. of lumber per year and has an LRF of 6.50. If the mill were to increase its LRF to 7.20 by making improvements in the operation, it would realize an additional 300,000 b.f. increase for each 0.01 improvement in LRF. The following chart depicts the effect 0.1% will have on recovery.



The following information represents a collection of 23 sawmill improvement studies conducted from 1984 through 1987. The studies represent a combined State-wide annual lumber production of 785 MMBF. For those interested in comparing LRF from different sawmills around the nation a recent technical report titled "Relative Softwood Conversion Efficiency by Region of the United States" has been published in the Forest Products Journal, Vol. 38, No. 2.

MONTANA UNWEIGHTED SELECTED STUDY RESULTS

	STUDMILLS			SAWMILLS		
	High	Avg.	Low	High	Avg.	Low
Current (LRF)	10.21	8.65	7.17	8.34	7.86	7.13
Potential (LRF)	11.00	10.18	9.53	10.24	9.58	8.62
Headsaw kerf						
(circular)	.340	.267	.189	.380	.340	.300
(band)	.155	.136	.120	.185	.161	.140
Resaw kerf						
(circular)	.167	.144	.123	.250	.153	.148
Green Target Size						
(4/4 Lumber)	1.06	1.01	.957	1.02	1.00	.959
(8/4 Lumber)	1.85	1.73	1.64	1.81	1.74	1.68
Planing Allowance						
(Bottom Head Only)	.078	.061	.042	.106	.066	.030
Within Board Variation						
(4/4)	.057	.051	.019	.106	.066	.023
(8/4)	.054	.037	.011	.054	.029	.010
Between Board Variation						
(4/4)	.031	.024	.013	.052	.023	.011
(8/4)	.060	.036	.014	.070	.040	.011
Average log Diameter		8.9			11.0	

1988 SME PUBLICATIONS/VIDEO CATALOG READY

The Society of Manufacturing Engineers (SME) announced the availability of its new 1988 "Publications/Video Catalog." This 72-page catalog lists over 300 practical resources for professionals in metalworking and automated manufacturing.

Examples of the topics covered in the 1988 SME Catalog include computer and automated manufacturing systems, management, tool engineering, machine vision, assembly, design for manufacture, industrial robots, pressworking, video training programs, videotapes

from the popular "Manufacturing Insights" series, software, information services, professional development, and technical papers.

To obtain a free copy of the 1988 SME Catalog, contact the Society of Manufacturing Engineers, Reference Publications Dept., One SME Drive, P.O. Box 930, Deerborn, Michigan 48121; (313) 271-1500.

Source FPJ, Vol 38, No. 4.

MEETINGS

July 20-22 - "Densified Wood Fuel (Wood Pellets): Manufacturing, Marketing, and Use", University Inn/Best Western Convention Center, Moscow, Idaho. This is the fifth in a series of Inland Empire Forest Products Marketing/Management Conferences sponsored by the Department of Forest Products, University of Idaho. For more information contact Bob Govett or Richard Folk at the Department of Forest Products, University of Idaho (208) 885-6126.

EQUIPMENT FOR SALE

One Clark Ranger 1979. Just had $1,000 work done on it. Will sell for $7,500. Contact right away. Also, one TD14 International crawler - does run, will take $800. Contact Russell Robertson of Robertson Logging, 216 2nd Avenue East, Roundup, Montana 59072. No phone.

For Sale: Post peeler with pointer, manufactured by Morbark Co. PTO, portable, near new condition - $12,000. Call Dave Jarrett at (406) 932-6737.

Logging Equipment for Sale: Cable Skidders: 1) '81 JD 640 23.1 x 26 tires $25,000 2) '79 JD 540B 23.1 x 26 tires $20,000 3) '73 Timberjack 208D 16.9 x 30 $11,000 4) '73 JD 440B 18.4 x 26 $10,500 5) '73 JD 540A 23.1 x 26 $10,500. Grapple Skidders: 6) '79 JD 540B $22,500 7) '79 JD 540B $24,500 8) '80 JD 640 $26,500 9) '84 JD640 Single Boom Grpl $37,500 10) '78 Timberjack 380 $18,500 11) '76 JD 540B $18,500 12) '76 JD 540A $13,000 13) '73 JD 540A $11,500 14) '78 Drott 40 20" Shear $23,500 15) '83 Barko 40 KBoom $6,500 16) Clark 666C Cable $15,500 17) Clark 666B Cable $12,000 18) Other equipment, shear and grapple attachments, tires, wheels and salvage parts for most logging equipment. Midwest Tractor Inc., Hwy 10 4 miles West, Big Lake, Minnesota 55309. Phone (612) 263-3777 or Ron (612) 295-5037.

PRODUCTS FOR SALE OR WANTED

1/4" to 2-1/4" diameter x 16 ft. lg. or larger dowels available in lengths up to 10 ft. long. Balls, bases, blocks, electronic parts, handles, knobs, moldings, plugs, reels, rollers, shaping, spools, toy parts, wedges, and wheels. Available in plain, dip spray or tumble finishes. We treat for outside use. Also, Cooper's and Food Processors supplies. Many other wood products to customer specs. Contact Ed Koelbl, American Wood Working Co., P.O. Box 335, Montello, Wisconsin 53949. Phone (608) 297-2131.

Indexable Carbides: Don't throw them away. We will resharpen them for you. Notcher/sizer planer carbides for $2.00 each, larger carbides also resharpened. Fast turn around service. New indexable carbide sq..650" squares $4.00 each. New 1" round notcher carbides $5.75 each. Wagner's Machine Repair, RD#1, Box 424, 136 Ridgerd, Beaver Springs, Pennsylvania 17812. Phone (717) 658-7301.

Wanting to buy on continuing contract: Truckload quantities of rough, green fir/larch 2x4 - 2x12 2+ btr. Heavy 2x6 and 2x8. Can take 8' and longer. Wane free and/or pencil wane only. Contact Joel at Fox Lumber, phone (406) 363-5140.

SERVICES WANTED

Wanted: Sawyer for 2 MMBF/year sawmill in Kodiak, Alaska. For more information contact Reid Ogswell, Timberline Inc., P.O. Box 722, Kodiak, Alaska 99615; or phone (907) 486-4486.

RECENT PUBLICATIONS

The following list of publications have recently been published by the Forest Products Laboratory in Madison, Wisconsin. To obtain a free copy, contact: Information Services, U.S. Department of Agriculture Forest Service, Forest Products Laboratory, One Gifford Pinchot Drive, Madison, Wisonsin 53705-2398 or phone (608) 264-5637.

1. **The Stumpage Market Impact of Tibmer Utilization Research**, Skog, Kenneth; Haynes, Richard. Forest Prod. J. 37(6): 54-60; 1987.

2. **Subtropical Testing of ACA-Treated Hardwood Particleboard**, Hall, Henry J.; Gjovik, Lee R.; Schmidt, Elmer L.; Gertjejansen, Roland O.; Laundrie, James F. Forest Prod. J. 37(4): 49-53; 1987.

3. **The Outlook for the Use of Wood Products in New Housing in the 21st Century**, Marcin, Thomas C. Forest Prod. J. 37(7/8): 55-61; 1987.

4. **Forest Harvesting, Wood Utilization, and Products of the Future**, Montrey, H.M.; Zerbe, John I. In: Crowley, John J., ed. 1986 Yearbook of agriculture: Research for tomorrow. 1986: 253-261.

5. **New Ideas for Timber Bridges**, Oliva, Michael G.; Tuomi, Roger L.; Dimakis, A.G. In: Trans. Res. Rec. 1053. Washington, DC: Transportation Research Board, National Research Council; 1986: 59-64. (Available from Information Services Division, Kurt F. Wendt Library, University of Wisconsin-Madison, 215 North Randall Avenue, Madison, Wisconsin 53706; $5).

6. **Use of Wood Energy in the United States - An Opportunity**, Koning, John W., Jr.; Skog, Kenneth E. Biomass. 12: 27-36; 1987.

7. **Paint Adhesion to Weathered Wood**, Williams, R. Sam; Winandy, Jerrold E.; Feist, William C. J. Coatings Technol. 59(749): 43-49; 1987.

If you wish to advertise a forest product or a piece of wood-processing machinery in this bulletin complete the form below. No charge is made for this service. If you wish to rerun an item, a written request must be submitted before the next issue.

NAME OF PERSON OR FIRM: _____

MAILING ADDRESS: _____

ZIP CODE: _____ PHONE: _____

Type or print your advertisement in the space below, detach and return to:

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Forestry Division
Forest Products Bulletin
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